

What is claimed is:

1. A circuit board, comprising:

a base layer;

a first conductive circuit manufactured by hardening a
5 conductive paste material formed in a predetermined shape on
said base layer;

a first insulating layer manufactured by hardening an
insulating paste material formed on said base layer including
said first conductive circuit; and

10 a second conductive circuit manufactured by hardening a
conductive paste material formed in a predetermined shape on
said first insulating layer.

2. The circuit board of claim 1,

15 wherein said first insulating layer is formed only on a part
of said base layer.

3. The circuit board of claim 1,

wherein said base layer is a film member.

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4. The circuit board of claim 3,

further comprising a plate member which is fitted to a part
of the opposite surface of said base layer where said first
conductive circuit is formed.

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5. The circuit board of claim 1,

wherein said base layer is a plate member.

6. The circuit board of claim 5,
further comprising another plate member,
wherein at least said first insulating layer is indirectly
5 held between said base layer and said another plate member.

7. The circuit board of claim 1,
wherein a connection opening is formed in said first
insulating layer formed on said first conductive circuit, and
10 said first conductive circuit and said second conductive circuit
are electrically connected with each other via said connection
opening.

8. The circuit board of claim 1,
15 further comprising a resistance layer formed by hardening
a resistance paste material coated on said base layer or said
first insulating layer,
wherein said resistance layer forms a resistor electrically
connected to said first conductive circuit or said second
20 conductive circuit.

9. The circuit board of claim 1,
further comprising a resistance layer formed by hardening
a resistance paste material applied to a resistance opening
25 formed in said first insulating layer,
wherein said resistance layer forms a resistor electrically
connected to said first conductive circuit and said second

conductive circuit.

10. The circuit board of claim 1,

5 further comprising a dielectric layer formed by hardening
a dielectric paste material coated on said base layer or said
first insulating layer,

wherein said dielectric layer forms a capacitor
electrically connected to said first conductive circuit or said
second conductive circuit.

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11. The circuit board of claim 1,

further comprising a dielectric layer formed by hardening
a dielectric paste material applied to a dielectric opening
formed in said first insulating layer,

15 wherein said dielectric layer forms a capacitor
electrically connected to said first conductive circuit and said
second conductive circuit.

12. The circuit board of claim 1,

20 wherein a part of said first conductive circuit or said
second conductive circuit forms an inductor.

13. The circuit board of claim 1,

25 wherein said first conductive circuit or said second
conductive circuit is connected to metallic wiring formed by
any one of depositing, plating and sputtering processes.

14. The circuit board of claim 13,
wherein said metallic wiring is connected to an electrode
terminals of bare chip IC.

5 15. The circuit board of claim 1,
further comprising electronic parts mounted on said second
conductive circuit.

16. A method of manufacturing a circuit board, comprising
10 the steps of:

a) forming a first conductive circuit by hardening a
conductive paste material formed in a predetermined shape on
a base layer;

b) forming a first insulating layer by hardening an
15 insulating paste material coated on said base layer including
said first conductive circuit; and

c) forming a second conductive circuit by hardening a
conductive paste material formed in a predetermined shape on
said first insulating layer.

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17. The method of manufacturing a circuit board of claim
16,

wherein a connection opening is formed in said first
insulating layer on said first conductive circuit in the step
25 b), and

said first conductive circuit and said second conductive
circuit are connected with said conductive paste material

applied to said connection opening in the step c).

18. The method of manufacturing a circuit board of claim 16,

5 further comprising a step of forming a resistive layer by hardening a resistance paste material coated on said base layer or said first insulating layer in the step a) or c),

wherein a resistor electrically connecting said first conductive circuit to said second conductive circuit is formed.

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19. The method of manufacturing a circuit board of claim 16,

further comprising the steps of forming a resistance opening in said first insulating layer on said first conductive circuit
15 in the step b), and

forming a resistive layer by hardening a resistance paste material applied to said resistance opening in the step c),

wherein a resistor electrically connected to said first conductive circuit and said second conductive circuit is formed.

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20. The method of manufacturing a circuit board of claim 16,

further comprising a step of forming a dielectric layer by hardening a dielectric paste material coated on said base layer
25 or said first insulating layer in the step a) or c),

wherein a capacitor electrically connecting said first conductive circuit to said second conductive circuit is formed.

21. The method of manufacturing a circuit board of claim
16,

further comprising the steps of forming a dielectric opening
5 in said first insulating layer on said first conductive circuit
in the step b), and

forming a dielectric layer by hardening a dielectric paste
material applied to said dielectric opening in the step c),

wherein a capacitor electrically connected to said first
10 conductive circuit and said second conductive circuit is formed.

22. The method of manufacturing a circuit board of claim
16,

wherein an inductor is formed on a part of said first
15 conductive circuit or said second conductive circuit in the step
a) or c).

23. A circuit board, comprising:

a part arrangement layer with electronic parts disposed in
20 such manner that electrode terminals of said electronic parts
having the electrode terminals are exposed on one surface thereof,
and

a second conductive circuit formed in a predetermined shape,
which is electrically connected to said electrode terminals on
25 said part arrangement layer,

wherein said part arrangement layer comprises

a first conductive circuit formed by hardening a conductive

paste material coated in a predetermined shape, and

an insulating layer formed by hardening an insulating paste material coated on said first conductive circuit, and is formed in such manner that said electrode terminals of said electronic parts are exposed on the surface of said insulating layer.

24. The circuit board of claim 23,

wherein there is provided a connection opening in said insulating layer on said first conductive circuit, and said first conductive circuit and said second conductive circuit are electrically connected with each other via said connection opening.

25. The circuit board of claim 23,

wherein said part arrangement layer further includes other electronic parts electrically connected to said first conductive circuit.

26. The circuit board of claim 23,

further comprising a base layer which holds said part arrangement layer, being in tight contact with the opposite surface of the surface where said electrode terminals of said electronic parts are formed,

wherein said electronic parts are bonded to said base layer by using adhesive.

27. The circuit board of claim 26,

wherein said part arrangement layer is formed only on a part of said base layer.

28. The circuit board of claim 26,
5 wherein said base layer is a film member.

29. The circuit board of claim 28,
further comprising a plate member fitted to a part of the
opposite surface of said part arrangement layer of said base
10 layer.

30. The circuit board of claim 26,
wherein said base layer is a plate member.

15 31. The circuit board of claim 30,
further comprising another plate member,
wherein said part arrangement layer is sandwiched between
said base layer and said another plate member.

20 32. The circuit board of claim 23,
wherein said first conductive circuit or said second
conductive circuit is connected to metallic wiring formed by
any one of depositing, plating and sputtering processes.

25 33. The circuit board of claim 32,
wherein said electronic part is a semiconductor integrated
circuit element of bare chip configuration, and

said metallic wiring is formed so as to connect the electrode terminals of said semiconductor integrated circuit element in said part arrangement layer to said second conductive circuit.

5 34. The circuit board of claim 23,
 wherein said part arrangement layer is further mounted with
 other electronic parts.

10 35. A method of manufacturing a circuit board, comprising
 the steps of:

 a) forming a part arrangement layer having a part opening,
 wherein the step of forming said part arrangement layer
 comprises the steps of:

15 a1) forming a first conductive circuit by hardening a
 conductive paste material formed in a predetermined shape;

 a2) forming a first insulating layer by hardening an
 insulating paste material coated in a shape having said part
 opening on a predetermined portion of a surface including said
 first conductive circuit;

20 a3) inserting an electronic part into said part opening in
 such manner that an electrode terminals is exposed; and

 a4) forming a second insulating layer by hardening an
 insulating paste material coated on said electronic part and
 said first insulating layer in such manner that at least said
25 electrode terminals surface of said electronic part is exposed,
 and

 b) forming a second conductive circuit in a predetermined

shape on said first part arrangement layer including said electrode terminals of said electronic part.

36. The method of manufacturing a circuit board of claim
5 35,

wherein said second conductive circuit is formed by hardening a conductive paste coated in the step b):

37. The method of manufacturing a circuit board of claim
10 36,

wherein a connection opening is formed in said first insulating layer in a predetermined position of said first conductive circuit in the step a2), and

said first conductive circuit and said second conductive
15 circuit are electrically connected with each other by hardening the conductive paste material also applied to said connection opening in the step b).

38. The method of manufacturing a circuit board of claim
20 35,

further comprising the steps of making a second part opening that goes through said part arrangement layer and said second conductive circuit, and inserting a second electronic part thicker than the first electronic part into said second part
25 opening.

39. The method of manufacturing a circuit board of claim

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wherein said part arrangement layer is formed on a film base layer, and

said electronic part is inserted and secured in said part
5 opening with adhesive applied thereto in the step 3a).